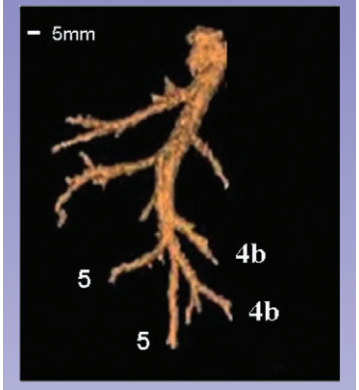
Highlights in this issue

Sarpel *et al*., p. 741

The mysteries of *H. pylori* in health and disease

The discovery of *H. pylori* by *Warren and Marshall* (*Lancet,* 1984) was greeted with skepticism initially but ultimately earned them the 2005 Nobel Prize in Physiology or Medicine. Today, we know that this bacterium colonizes the gastric mucosa in 50% of the world's population. Its fundamental role in diseases such as chronic gastritis, duodenal and gastric ulcers, and gastric cancer has been extensively studied. Only a tiny fraction of people infected with *H. pylori,* however, will develop gastric cancer. Furthermore, in some diseases (Barrett's esophagus) it may somehow be protective. The link between infection and actual clinical outcome may be genetically determined across a spectrum of virulence. Does *H. pylori* somehow factor in hepatobiliary disease? Apparently so, according to *Boonyanugomol et al.* from Bangkok. For the first time, these authors investigated well known *H. pylori* virulence-associated genes in hepatobiliary patients and correlated their prevalence with actual clinical outcomes. DNA was extracted from 58 cholangiocarcinoma and 22 cholelithiasis patients known to be *H. pylori*-positive. A virulence genotype so to speak for each patient was developed by PCR amplification, DNA sequencing and phylogenetic analysis. To tighten the association to hepatobiliary disease, patients with gastroduodenal diseases were deliberately excluded. *H. pylori* overall and its *cagA/cagE* virulence genes were detected significantly more often in cholangiocarcinoma (30%) than in cholelithiasis (4%) patients. It's no surprise that the authors raise the question of cause and effect for biliary cancer. But more simply, why is *H. pylori* even found in the biliary system? How does it get there and why? Is it dangerous for the host or perhaps even mutually-beneficial? How does environment contribute to the phylogenetic variations of its virulence? This report will indeed stimulate new questions about *H. pylori* in hepatobiliary disease. Whatever the answers, the mysteries of *H. pylori* in both health and disease will deepen.

Mark Callery

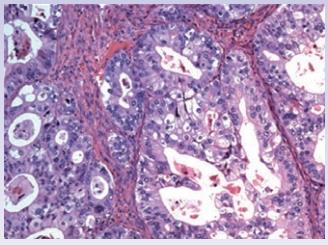


Faitot *et al.*, p. 746

Duodenal GISTs don't always require pancreaticoduodenectomy

Gastrointestinal stromal tumours are rare mesenchymal tumours that can arise anywhere in the GI tract. Although duodenal involvement is rare, the surgical decision making can be complex due to the local anatomical relationships that need to be considered. In this issue of *HPB, Kamath and colleagues* from the Mayo Clinic describe a series of 41 patients who were identified over a 13 year period. For these patients the most common presentations were due to complications of acute or chronic GI haemorrhage, although it is important to recognize that incidental diagnosis at endoscopy was also a frequent source of presentation. Although the tumours were distributed through out the duodenum in 26 of the 41 patients, the tumour was located within the second part of the duodenum. The key message that this paper provides is that for these 26 patients only 11 required pancreaticoduodenectomy to achieve a clear surgical margin. As the authors point out, for GIST's radical onocological resections aimed at performing a nodal clearance are not required as these tumours rarely spread to lymph nodes. Therefore the underlying surgical aims should be to achieve a negative margin while preserving underlying function and minimizing morbidity. Given that local resection can be performed with less morbidity than pancreaticoduodenctomy this should be considered as the first option.

Saxon Connor



Simo *et al.,* p. 725

Consider the venous outflow as well as the liver inflow during staged hepatic resections

The success of chemotherapy for colorectal hepatic metastases and the improvements in technique and anaesthesia, which have lead to improved safety in liver surgery, have meant that more patients can have the opportunity to undergo liver resection. Staged liver resection is defined as a planned procedure where part of the liver is removed and regeneration of the liver remnant is allowed to occur before a second surgery to remove residual tumour is performed. This type of surgery can be difficult for a number of reasons not least it demands that regeneration of the liver remnant will occur to allow the second procedure to take place safely. Chemotherapy induced sinusoidal obstruction syndrome, steatosis and fibrosis can all limit this regeneration. In surgical terms most of the attention in staged resection has concerned the hepatic inflow as a regulator of liver regeneration. In this issue of *HPB, Faitot et al.* explore the influence of venous congestion and venous drainage as a determinant of regenerative capacity. They studied patients who underwent a right hepatectomy in whom the middle hepatic vein tributaries to segment IV were removed or not. They demonstrated that preservation of the tributaries of segment IV draining into the middle hepatic vein permitted greater regeneration of segment IV after right hepatectomy than in patients where these tributaries were sacrificed. Planning staged resections is never easy, but this study highlights the importance of giving serious consideration to the venous drainage of the future liver remnant to ensure maximum regeneration and thereby improve ease and safety of subsequent liver resection.

Stephen Wigmore